

REMARKS

In light of the following remarks and above amendments, reconsideration and allowance of this application are respectfully requested.

It is submitted that these claims, as originally presented, are patentably distinct over the prior art cited by the Examiner, and that these claims were in full compliance with the requirements of 35 USC §112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

Amended claims 1-11 and 13-15 are in this application. Claims 12 and 16-20 have been canceled herein.

Applicants have amended the specification to clarify certain portions that pertain to the entry side and exit side of the LCD panel. No new matter has been added.

At paragraph 1 of the Final Office Action of November 5, 2003 issued in parent application Serial No. 09/870,327, the Examiner rejected claims 1 and 5-15 under 35 U.S.C. § 103(a) as being unpatentable over Mazaki et al. (U.S. Patent No. 6,124,913) in further view of Tsujikawa et al. (U.S. Patent No. 6,320,628) and Omae et al. (U.S. Patent 5,570,215). Applicants respectfully traverse the rejection.

Amended independent claim 1, recites in part, “A liquid crystal display projector apparatus...comprising...**a single optical compensator** located between the liquid crystal panel and the analyzer, the single optical compensator for **compensating an optical phase difference** caused by liquid crystal molecules having a pretilt angles in a liquid crystal layer...”

(Underlining and Bold added for emphasis.)

It is respectfully submitted that the above-mentioned references relied upon by the Examiner do not teach the above-recited feature of independent claim 1.

The Examiner admits that Mazaki does not disclose (i) a microlens array for focusing incoming light onto the display pixels and (ii) selecting the rotational angle of the compensator to provide the best contrast. The Examiner relies on Tsujikawa and Omae, respectively, to teach features (i) and (ii) not disclosed by Mazaki.

With respect to the Tsujikawa reference, as seen in figure 3, there is no optical compensator located between elements 8 and 9 which depict the liquid crystal element and the analyzer, respectively. Amended independent claim 1 specifically states that the optical compensator for compensating for an optical phase difference is located between the liquid crystal panel or element and the analyzer. Therefore, Tsujikawa does not disclose the limitation of amended independent claim 1 referring to only a single optical compensator between a liquid crystal panel and an analyzer that compensates for an optical phase difference. Moreover, Tsujikawa does not teach or suggest that a rotational angle position of an optical compensator is selected so as to provide the best contrast and uniformity of an image. Indeed, Tsujikawa is not concerned with contrast and uniformity, but with enhancing optical utilization efficiency.

Additionally, Omae does not disclose the second limitation of amended independent claim 1 noted above. Omae discloses adjusting the uniformity of a phase difference plate 113 on the exit side, which is used to adjust the phase or to effect a retardation of 5nm or more (column 4, lines 55-57). The phase difference plate is not the same as a compensator. A compensator is used to increase the viewing angle of the liquid projector apparatus. Therefore, Omae does not suggest or teach combining a compensator and a microlens on the exit side, as

does amended independent claim 1. For instance, in figure 1 of Omae, there is no compensator between the liquid crystal cell 112 and the analyzer 111, as is the case in the present invention.

Therefore, amended independent claim 1 is believed to be distinguishable from the applied combination of Mazaki, Tsujikawa and Omae for at least the reasons stated above.

Amended independent claim 6, recites in part, “A method of improving contrast of a liquid crystal projector apparatus comprising...locating **a second phase difference film adjacent to the first phase difference film** between the liquid crystal panel and the analyzer...”
(Underlining and Bold added for emphasis.)

Mazaki, Tsujikawa and Omae do not disclose a second phase difference film that is adjacent to a first phase difference film or the optical relationship therebetween, as does amended independent claim 6. Support for this feature can be found at page 61 of the present specification and at figure 21 of the drawings. Specifically, figure 21 illustrates two compensators 233 and 234 that are adjacent to each other in parallel and on only one side of the liquid crystal panel. These adjacent optical compensators function to compensate for an optical phase difference caused by liquid crystal molecules in a light entry side and a light exit side region of a liquid crystal panel. Therefore, amended independent claim 6 is also believed to be distinguishable from the applied combination of Mazaki, Tsujikawa and Omae for at least the reasons stated above. Claim 10 is a projector claim including elements of similar scope to the method steps of claim 6. Therefore, for reasons similar to those described above with regard to amended independent claim 6, withdrawal of the rejection to amended independent claim 10 is respectfully requested.

Claim 12 has been cancelled. Claims 5, 7-9, 11 and 13-15 are dependent from one of amended independent claims 1, 6 and 10 and, due to such dependency are also believed to be

distinguishable from the applied combination of Mazaki, Tsujikawa and Omae for the same reasons as amended independent claims 1, 6 and 10.

Applicants therefore respectfully request the rejection of claims 1 and 5-15 under 35 U.S.C. §103(a) be withdrawn.

At paragraph 2 of the outstanding Final Office Action of November 5, 2003 in the parent application, the Examiner rejected claims 2-4 under 35 U.S.C. § 103(a) as being unpatentable over Mazaki et al. (U.S. Patent No. 6,124,913) in further view of Tsujikawa et al. (U.S. Patent No. 6,320,628), Omae et al. (U.S. Patent 5,570,215) and Gunning et al. (EP 0622656). Applicants respectfully traverse the rejection.

Claims 2-4 are dependent from amended independent claim 1, and, due to such dependency, are also believed to be distinguishable from the applied combination of Mazaki, Tsujikawa and Omae for at least the reasons previously described. The Examiner did to rely on Gunning to overcome the above-identified deficiencies of Mazaki, Tsujikawa and Omae. Therefore, claims 2-4 are believed to be distinguishable from the applied combination of Mazaki, Tsujikawa, Omae and Gunning.

Applicants therefore, respectfully request that the rejection of claims 2-4 under 35 U.S.C. § 103(a) be withdrawn.

At paragraph 3 of the outstanding Final Office Action of November 5, 2003 in the parent application, the Examiner stated that claims 16-20 are allowed. These claims remain in the parent application Serial No. 09/870,327, and have therefore been cancelled herein.

It is to be appreciated that the foregoing comments concerning the disclosures in the cited prior art represent the present opinions of the applicants undersigned attorney and, in

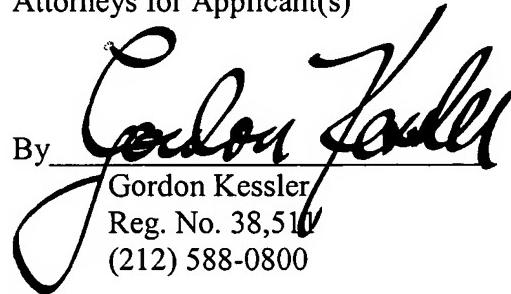
the event, that the Examiner disagrees with any such opinions, it is requested that the Examiner indicate where in the reference or references, there is the bases for a contrary view.

Please charge any fees incurred by reason of this response and not paid herewith to Deposit Account No. 50-0320.

Respectfully submitted,

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